

**Fig. 1****85P1B3 SSH sequence and GenBank homology to OIP5**

GATCAGAGGACACATGGGACTCTGCATCTTAATTCCTAAATTTACAGTCAAAGACATTTTCAGAGATAAGTATTAT
GAATTC AATAAGAATCTAAAGTAAGTTCTTAAGGCAAATAGCTATAAAAGAGAAGAATCCTTAGTCTCTCATCTTC
TAAAACAGCTTCACAAATAATTTGGAAAATCAGCCTAAAGGTAAATAGAACTGCATTTCCCTCCATTCTTGAA
GCCAATCTTTTCAAGAAATGACTAAGCAGCACCTGTTGTTGAAGACAGCAATAAAGCCTGAACCTGACACTCAAG
CTTTGGTACAGGATC

gb AF025441.1 AF025441	Homo sapiens Opa-interacting protein...	632	e-179
gb AF158642.1 AF158642	Homo sapiens metalloproteinase-disin...	42	0.12
gb AC005075.2 AC005075	Homo sapiens clone RG219E16, complet...	42	0.12
emb AL096773.6 HS1000E10	Human DNA sequence from clone 1000...	40	0.48

>gb|AF025441.1|AF025441 Homo sapiens Opa-interacting protein OIP5 mRNA,
partial cds

Length = 1197

Score = 632 bits (319), Expect = e-179
Identities = 319/319 (100%)
Strand = Plus / Minus

```

Query: 1      gatcagaggacacatgggactctgcatcttaattcctaaatttacagtcaaagacatttt 60
             |||
Sbjct: 1013   gatcagaggacacatgggactctgcatcttaattcctaaatttacagtcaaagacatttt 954

Query: 61      cagagataagtattatgaattcaataagaatctaaagtaagttcttaaggcaaatagcta 120
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Sbjct: 953    cagagataagtattatgaattcaataagaatctaaagtaagttcttaaggcaaatagcta 894

Query: 121     taaaagagaagaatccttagtctctcatcttctaaaaacagcttcacaaataatttggaa 180
             |||
Sbjct: 893    taaaagagaagaatccttagtctctcatcttctaaaaacagcttcacaaataatttggaa 834

Query: 181     aatcagcctaaaggtaaataagaaactgcatttccctccattcttgaagccaatcttttt 240
             |||
Sbjct: 833    aatcagcctaaaggtaaataagaaactgcatttccctccattcttgaagccaatcttttt 774

Query: 241     caagaaatgactaagcagcacctgttgttgaagacagcaataaagcctgaacctgacact 300
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Query: 301     caagctttgttacaggatc 319
             |||
Sbjct: 713    caagctttgttacaggatc 695

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Fig. 2-A**cDNA Sequence and ORF of 85P1B3/OIP5 clone A**

5'	GGC	TGC	GGG	AAG	ATG	GCG	GCT	CAG	CCG	CTG	CGG	CAT	CGC	TCA	CGT	TGT	GCA	ACG	
					M	A	A	Q	P	L	R	H	R	S	R	C	A	T	
	CCG	CCC	CGG	GGG	GAC	TTT	TGT	GGT	GGC	ACT	GAG	AGG	GCG	ATT	GAC	CAA	GCT	TCT	
	P	P	R	G	D	F	C	G	G	T	E	R	A	I	D	Q	A	S	
	TTT	ACG	ACC	TCC	ATG	GAG	TGG	GAT	ACG	CAG	GTG	GTG	AAG	GGG	TCC	TCG	CCG	CTC	
	F	T	T	S	M	E	W	D	T	Q	V	V	K	G	S	S	P	L	
	GGC	CCC	GCA	GGG	CTG	GGG	GCT	GAG	GAG	CCA	GCC	GCC	GGC	CCG	CAG	CTG	CCG	TCT	
	G	P	A	G	L	G	A	E	E	P	A	A	G	P	Q	L	P	S	
	TGG	CTG	CAG	CCT	GAG	AGG	TGC	GCT	GTG	TTC	CAG	TGC	GCA	CAG	TGT	CAC	GCA	GTG	
	W	L	Q	P	E	R	C	A	V	F	Q	C	A	Q	C	H	A	V	
	CTC	GCC	GAC	TCG	GTG	CAC	CTC	GCC	TGG	GAC	CTG	TCG	CGG	TCC	CTC	GGG	GCC	GTG	
	L	A	D	S	V	H	L	A	W	D	L	S	R	S	L	G	A	V	
	GTC	TTC	TCC	AGA	GTT	ACA	AAT	AAC	GTC	GTT	TTG	GAA	GCG	CCC	TTC	CTA	GTT	GGC	
	V	F	S	R	V	T	N	N	V	V	L	E	A	P	F	L	V	G	
	ATT	GAA	GGT	TCA	CTC	AAA	GGC	AGT	ACT	TAC	AAC	CTT	TTA	TTC	TGT	GGT	TCT	TGT	
	I	E	G	S	L	K	G	S	T	Y	N	L	L	F	C	G	S	C	
	GGG	ATT	CCC	GTT	GGT	TTC	CAT	CTG	TAT	TCT	ACC	CAT	GCT	GCC	CTG	GCT	GCC	TTG	
	G	I	P	V	G	F	H	L	Y	S	T	H	A	A	L	A	A	L	
	AGA	GGT	CAC	TTC	TGC	CTT	TCC	AGT	GAC	AAA	ATG	GTG	TGC	TAT	CTC	TTA	AAA	ACA	
	R	G	H	F	C	L	S	S	D	K	M	V	C	Y	L	L	K	T	
	AAA	GCC	ATA	GTA	AAT	GCA	TCA	GAG	ATG	GAT	ATT	CAA	AAT	GTT	CCT	CTA	TCA	GAA	
	K	A	I	V	N	A	S	E	M	D	I	Q	N	V	P	L	S	E	
	AAG	ATT	GCA	GAG	CTG	AAA	GAG	AAG	ATA	GTG	CTA	ACG	CAC	AAT	CGC	TTA	AAA	TCA	
	K	I	A	E	L	K	E	K	I	V	L	T	H	N	R	L	K	S	
	CTA	ATG	AAG	ATT	CTG	AGT	GAA	GTG	ACT	CCT	GAC	CAG	TCC	AAG	CCA	GAA	AAC	TGA	
	L	M	K	I	L	S	E	V	T	P	D	Q	S	K	P	E	N	*	
			711			720			729			738			747			756	

Fig. 2-B

[illegible]

Fig. 3

85P1B3/OIP5 protein sequence.

```
1  MAAQPLRHRS RCATPPRGDF CGGTERAIDQ ASFTTSMEDW TQVVKGSSPL GPAGLGAEPP
61 AAGPQLPSWL QPERCAVFQC AQCHAVLADS VHLAWDLSRS LGAVVFSRVT NNVVLEAPFL
121 VGIEGSLKGS TYNLLFCGSC GIPVGFHLYS THAALAALRG HFCLSSDKMV CYLLKTKAIV
181 NASEMDIQNV PLSEKIAELK EKIVLTHNRL KSLMKILSEV TPDQSKPEN*
```

Fig. 4

Alignment of 85P1B3 with OIP5.

>gi|2815610|gb|AAC39561.1| (AF025441) Opa-interacting protein OIP5 [Homo sapiens]

Length = 231

Score = 462 bits (1189), Expect = e-130

Identities = 229/229 (100%), Positives = 229/229 (100%)

```
85P1B3: 1  MAAQPLRHRSRCATPPRGDFCGGTERAIDQASFTTSM EWDTQVVKGSSPLGPAGLGAE EP 60
      MAAQPLRHRSRCATPPRGDFCGGTERAIDQASFTTSM EWDTQVVKGSSPLGPAGLGAE EP
OIP5: 3  MAAQPLRHRSRCATPPRGDFCGGTERAIDQASFTTSM EWDTQVVKGSSPLGPAGLGAE EP 62

85P1B3: 61  AAGPQLPSWLQPERCAVFQCAQCHAVLADSVHLAWDL SRSLGAVVFSRV TNNVVLEAPFL 120
      AAGPQLPSWLQPERCAVFQCAQCHAVLADSVHLAWDL SRSLGAVVFSRV TNNVVLEAPFL
OIP5: 63  AAGPQLPSWLQPERCAVFQCAQCHAVLADSVHLAWDL SRSLGAVVFSRV TNNVVLEAPFL 122

85P1B3:121  VGIEGSLKGSTYNLLFCGSCGIPVGFHLYSTHAALAALRGHFCLSSDKMVCYLLKTKAIV 180
      VGIEGSLKGSTYNLLFCGSCGIPVGFHLYSTHAALAALRGHFCLSSDKMVCYLLKTKAIV
OIP5: 123  VGIEGSLKGSTYNLLFCGSCGIPVGFHLYSTHAALAALRGHFCLSSDKMVCYLLKTKAIV 182

85P1B3:181  NASEMDIQNVPLSEKIAELKEKIVLTHNRLKSLMKILSEVTPDQSKPEN 229
      NASEMDIQNVPLSEKIAELKEKIVLTHNRLKSLMKILSEVTPDQSKPEN
OIP5: 183  NASEMDIQNVPLSEKIAELKEKIVLTHNRLKSLMKILSEVTPDQSKPEN 231
```

Fig. 5: 85P1B3 Hydrophilicity Profile
(Hopp T.P., Woods K.R., 1981. Proc. Natl. Acad. Sci. U.S.A. 78:3824-3828)

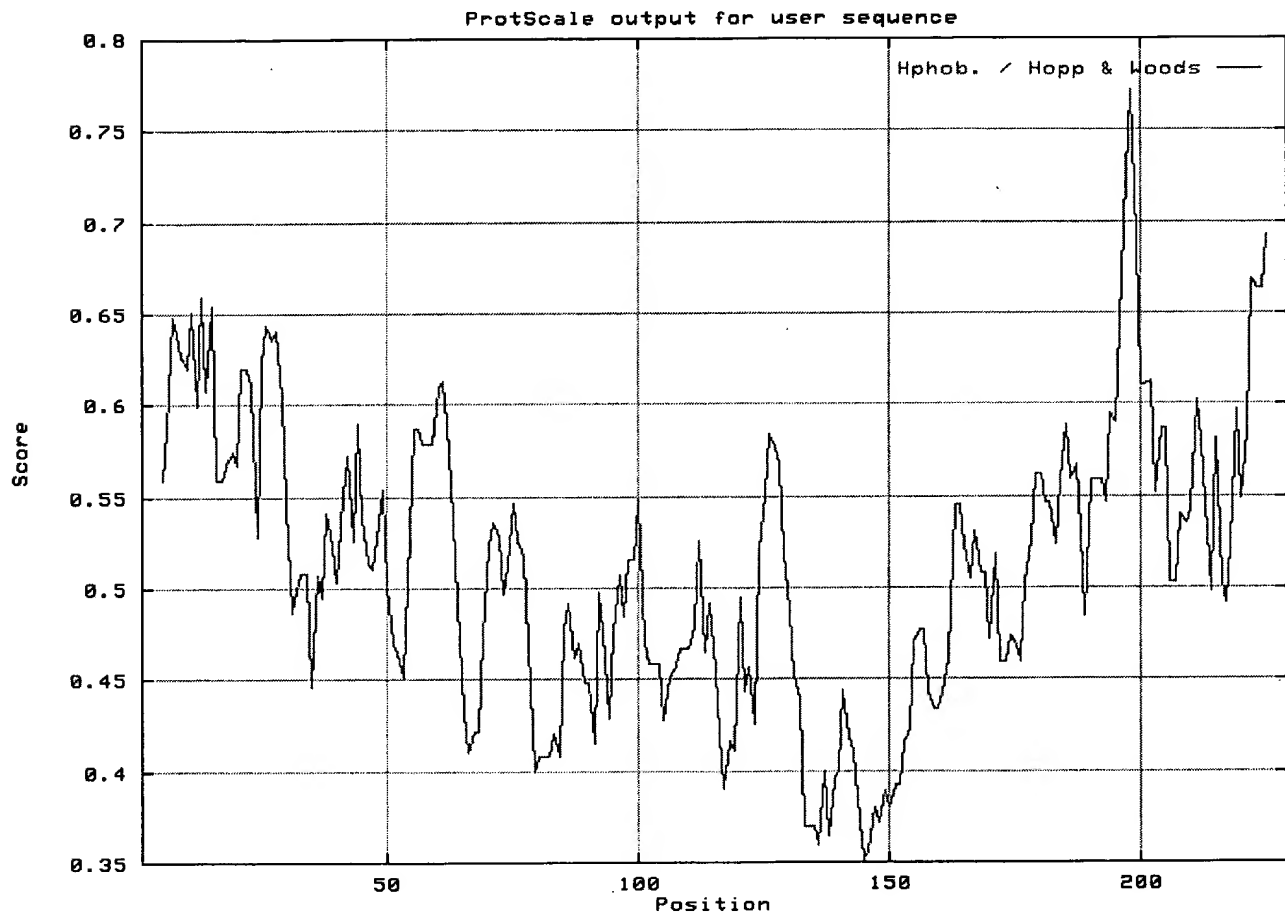


Fig. 6: 85P1B3 Hydropathicity Profile

(Kyte J., Doolittle R.F., 1982. J. Mol. Biol. 157:105-132)

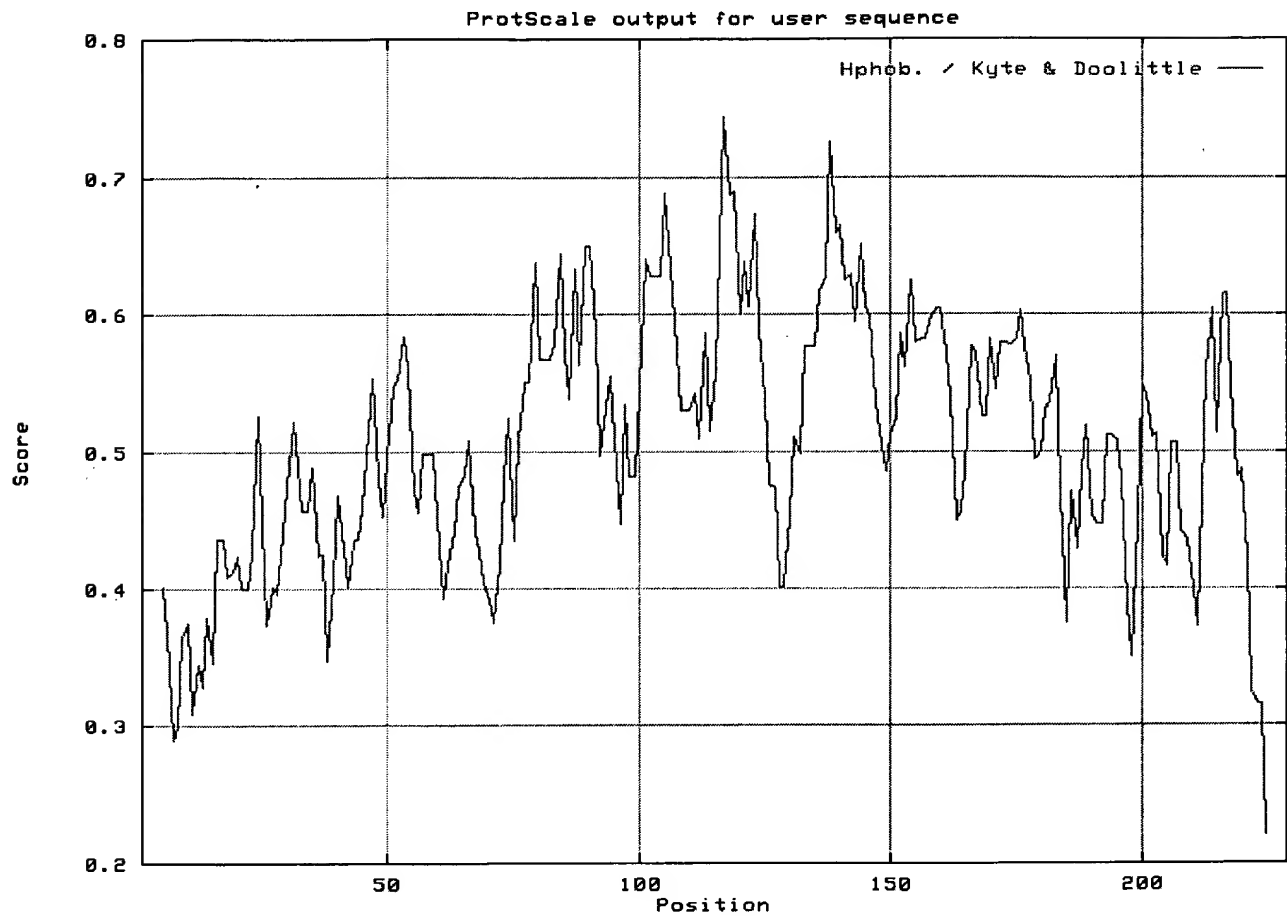


Fig. 7: 85P1B3 % Accessible Residues Profile

(Janin J., 1979. Nature 277:491-492)

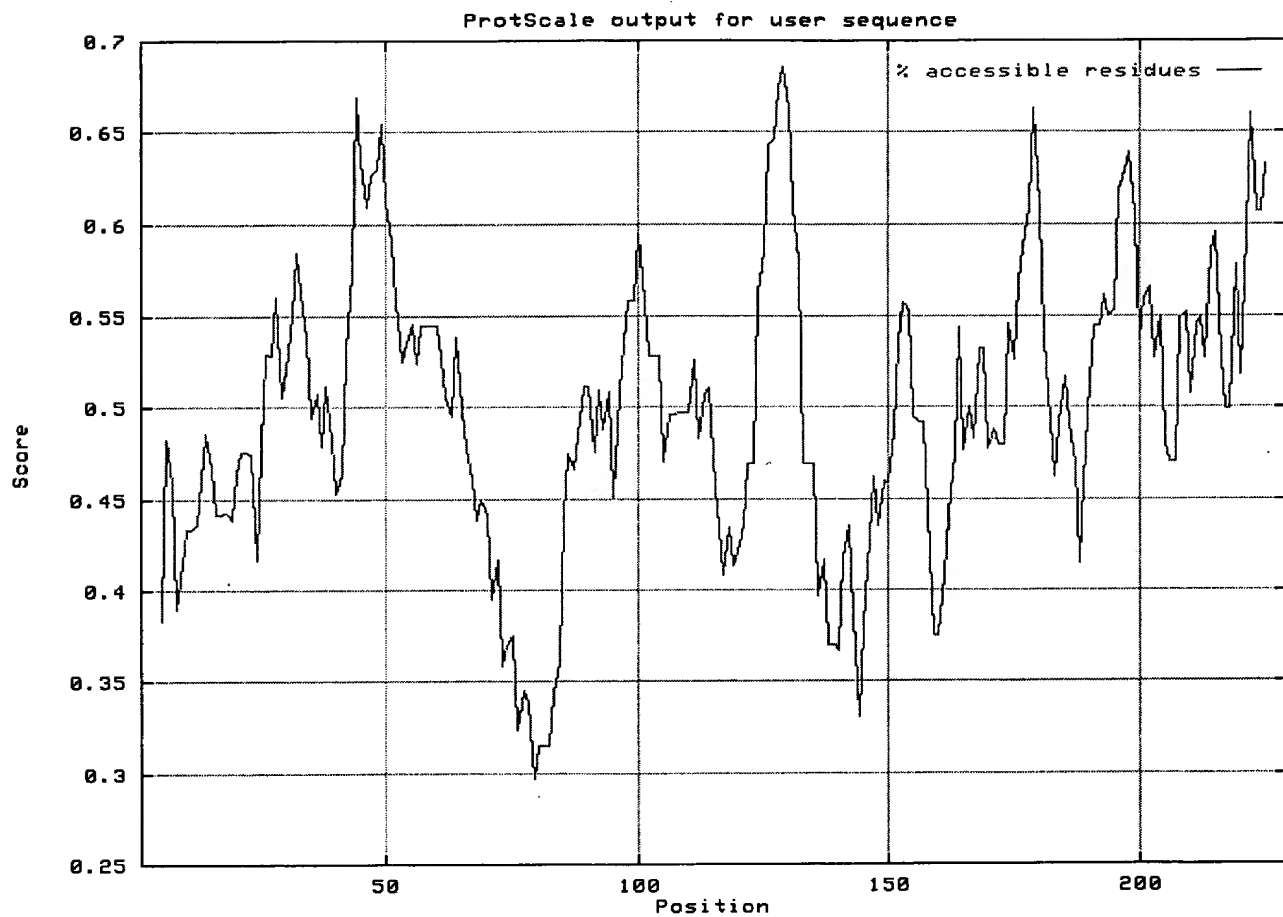


Fig. 8: 85P1B3 Average Flexibility Profile
(Bhaskaran R., Ponnuswamy P.K., 1988. Int. J. Pept. Protein Res. 32:242-255)

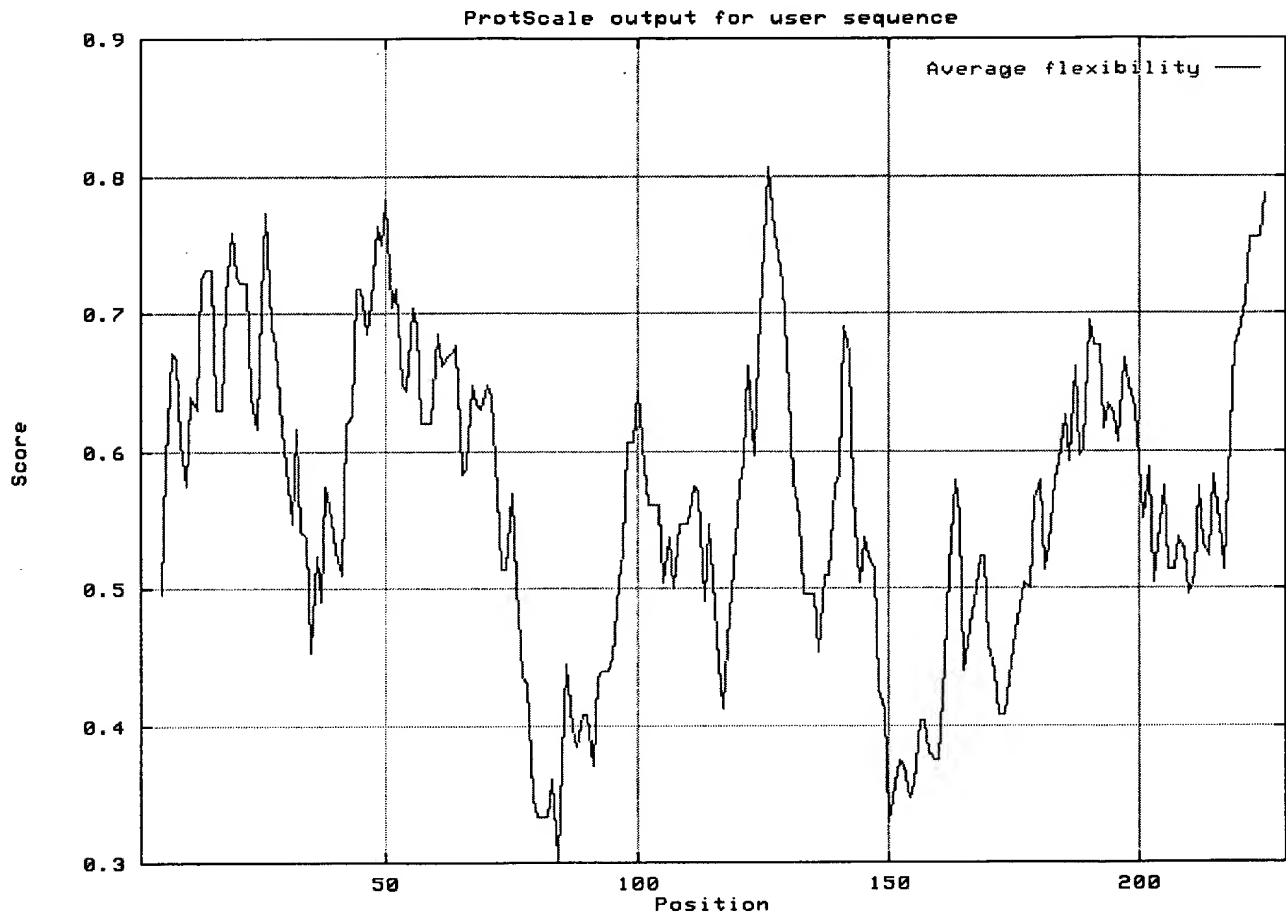


Fig. 9: 85P1B3 Beta-turn Profile
(Deleage, G., Roux B. 1987. Protein Engineering 1:289-294)

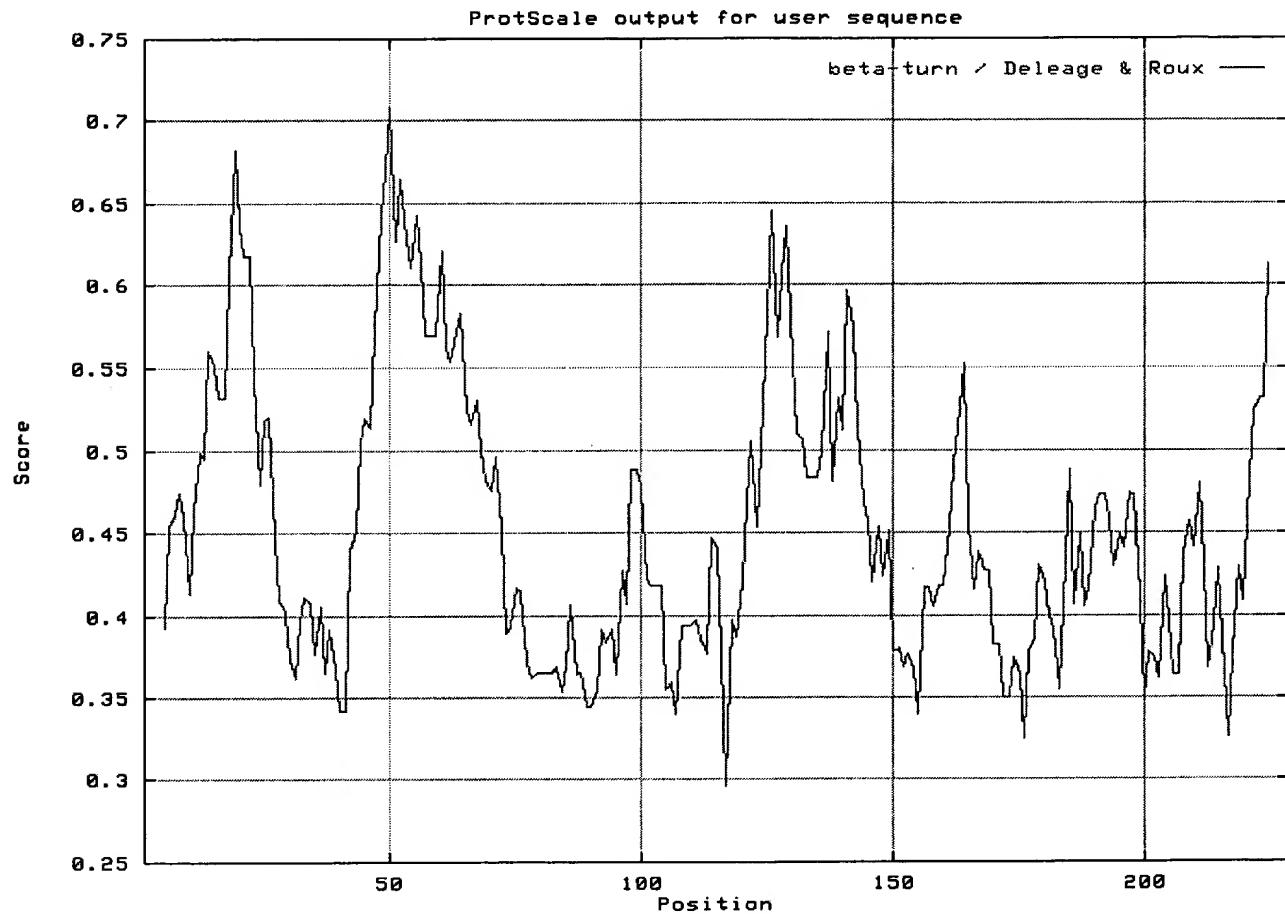


Fig. 10: RT-PCR Analysis of 85P1B3 Expression

- 1) Vital Pool 1
- 2) Vital Pool 2
- 3) Xenograft Pool
- 4) Prostate Cancer Pool
- 5) Bladder Cancer Pool
- 6) Kidney Cancer Pool
- 7) Colon Cancer Pool
- 8) Lung Cancer Pool
- 9) Ovary Cancer Pool
- 10) Breast Cancer Pool
- 11) Metastasis Pool
- 12) H2O

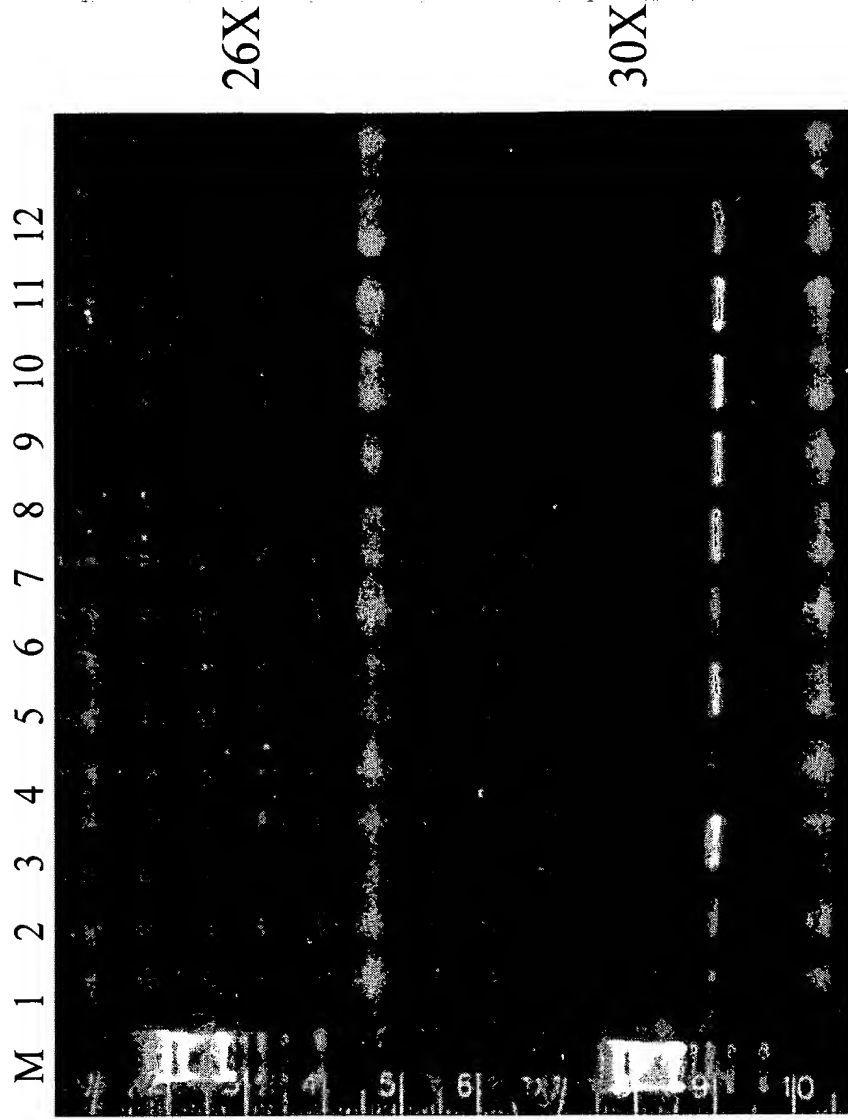


Fig. 11: Expression of 85P1B3 in Normal Human Tissues

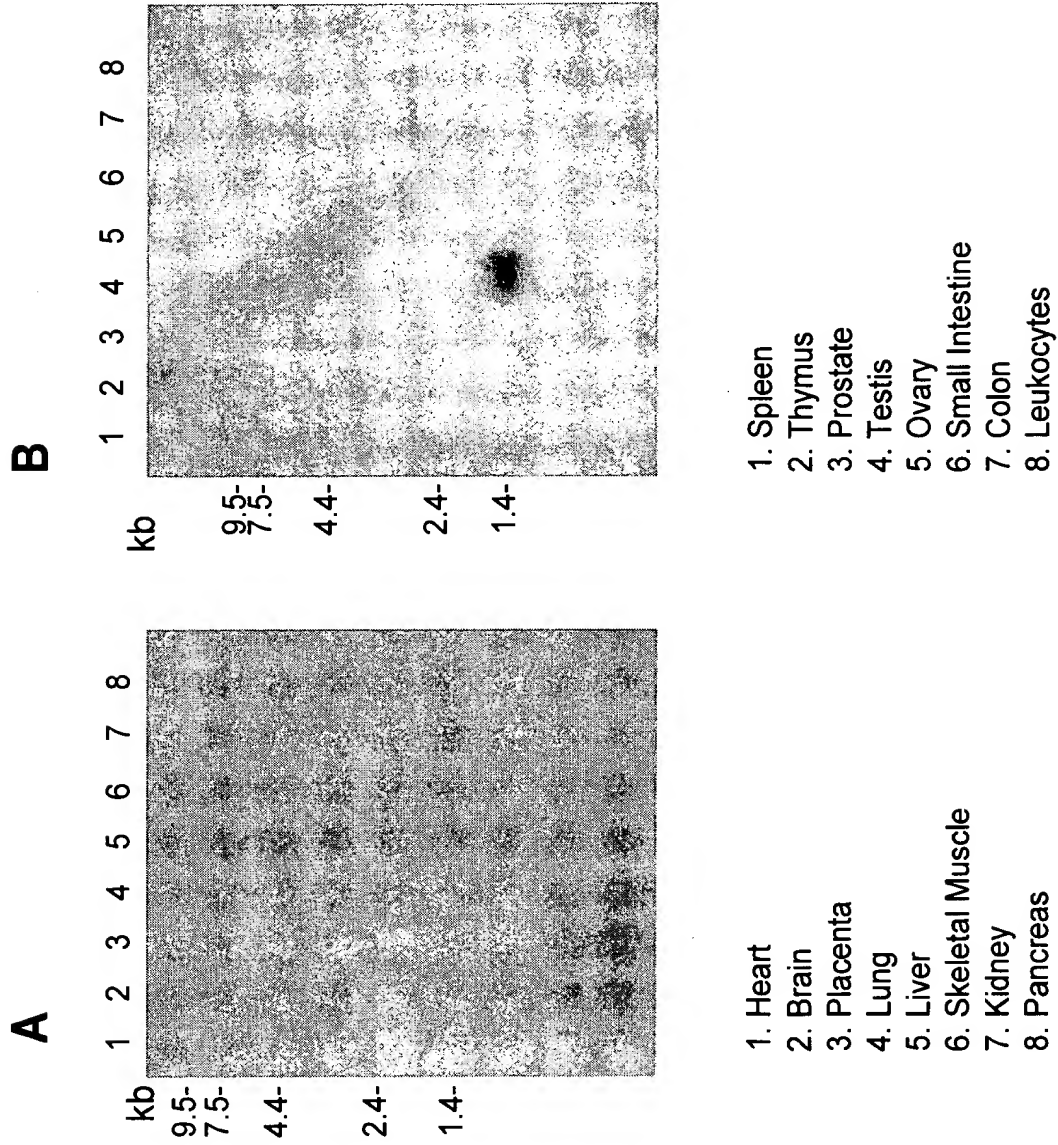


Fig. 12: Expression of 85P1B3 in Human Cancer Cell lines

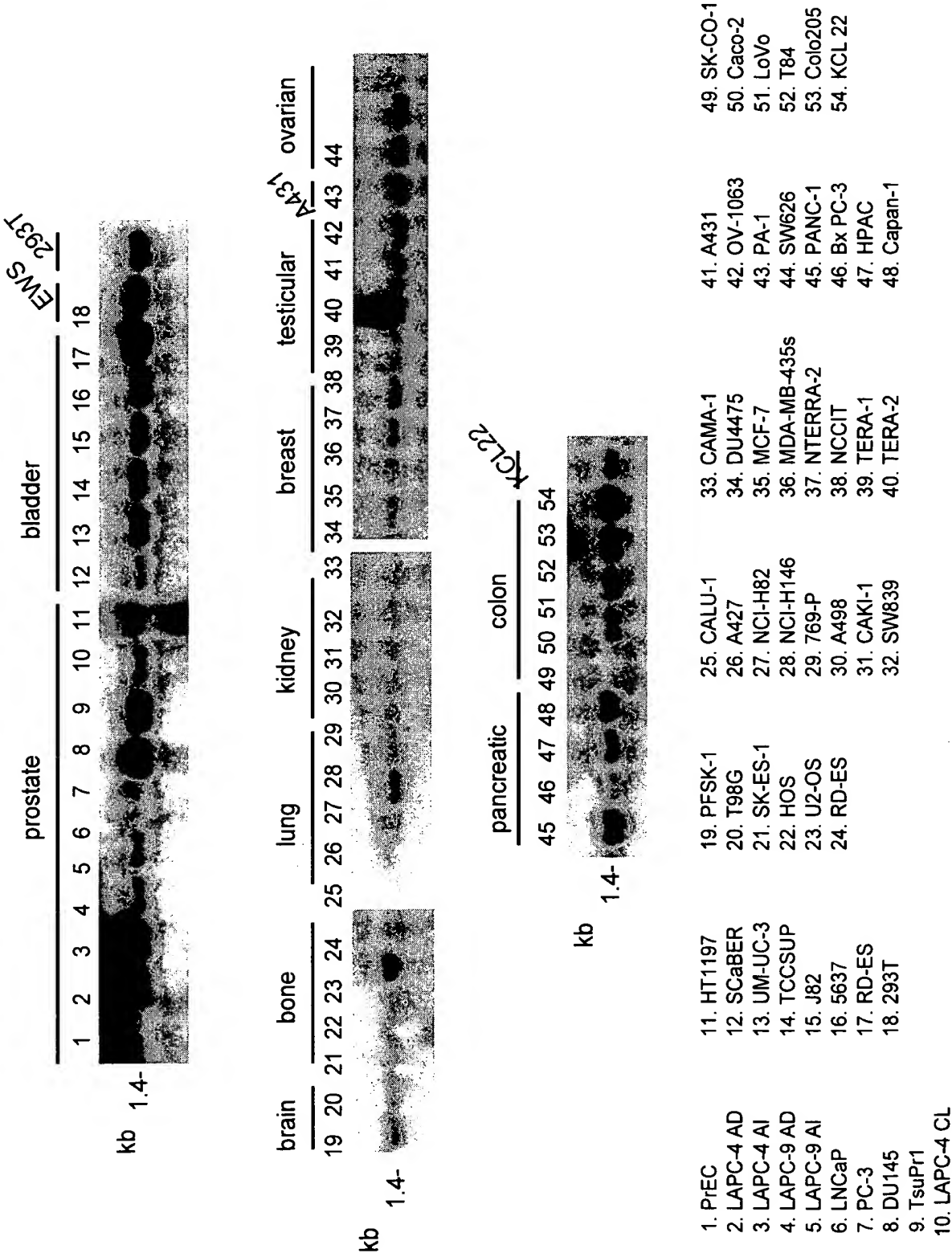
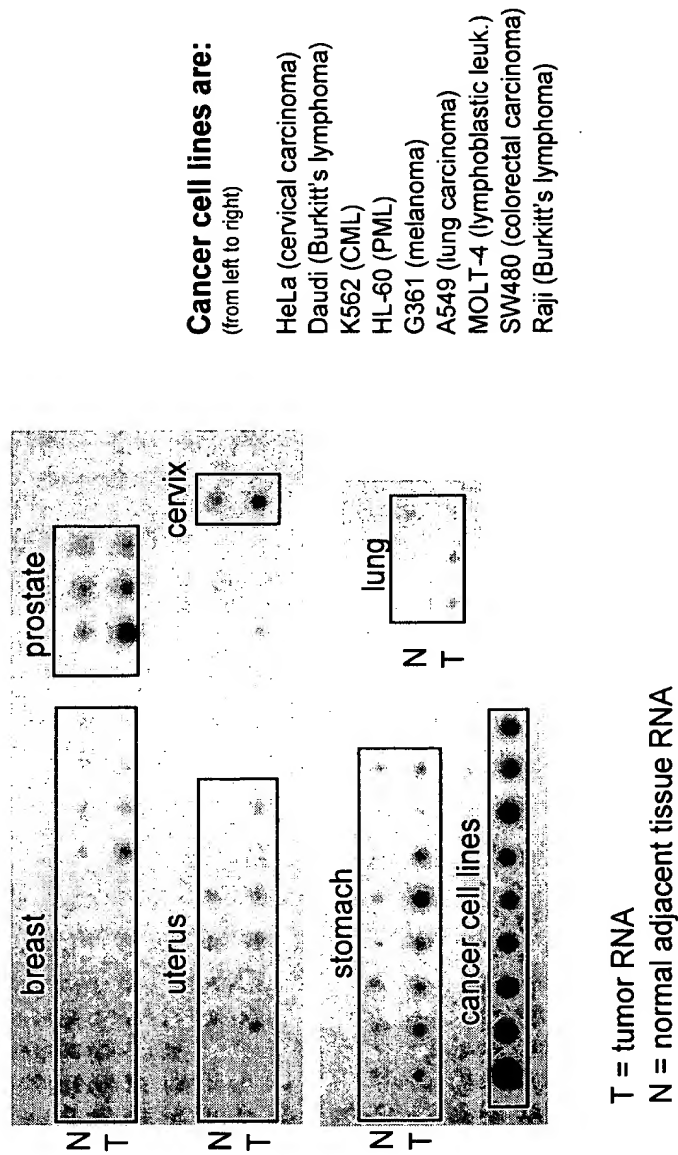
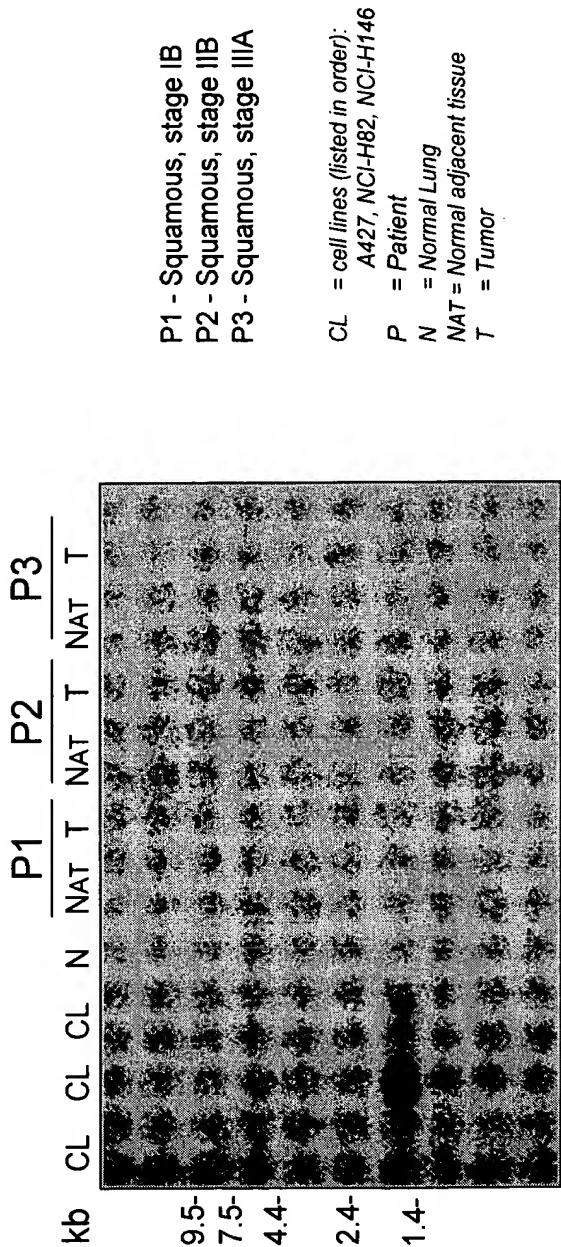


Fig. 13: Expression of 85P1B3 in Patient Cancer Specimens and Cancer Cell Lines

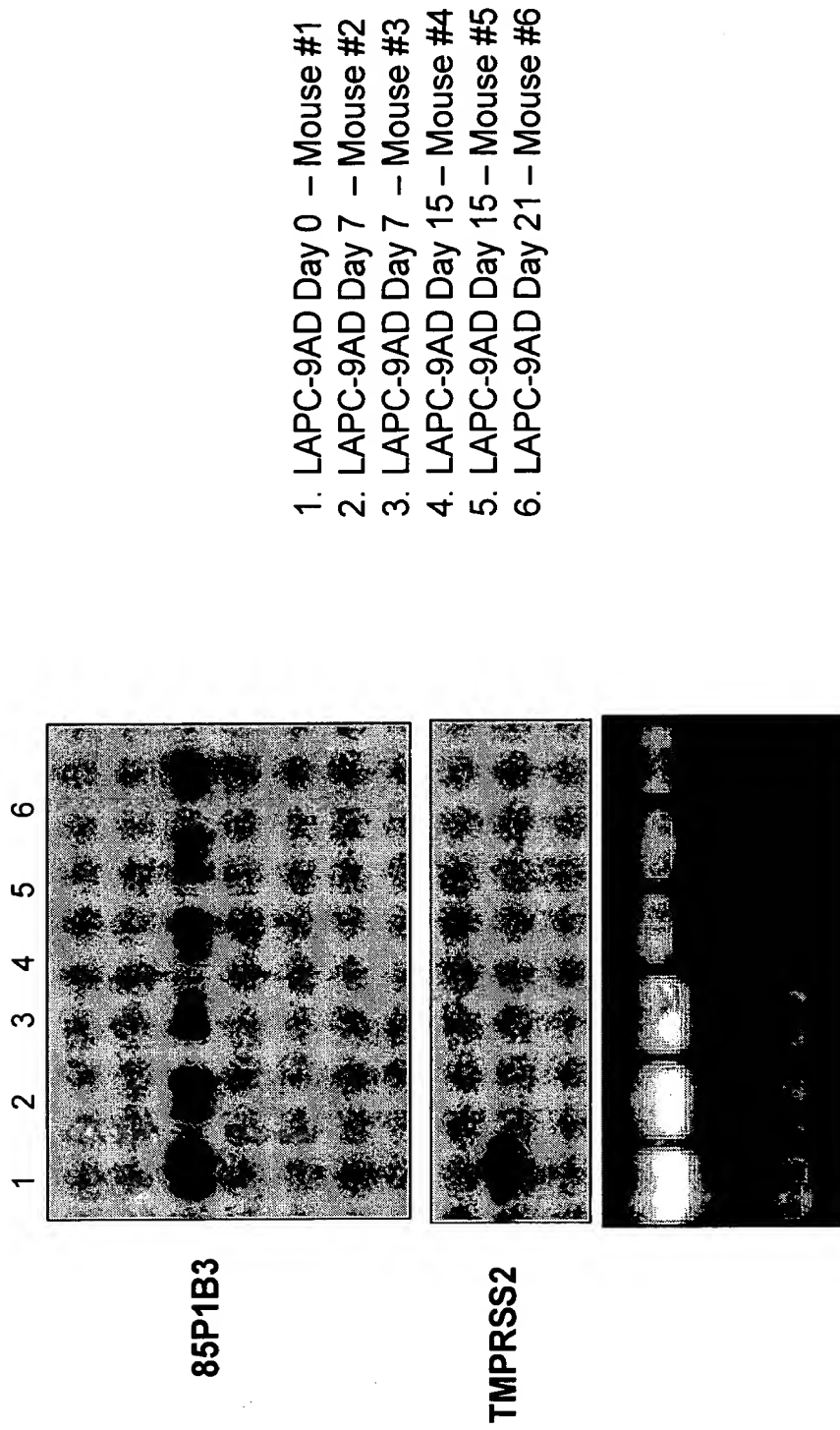


P1 – Stage III, T2N1MX
P2 – Stage III, T3N1MX

Fig. 16: Expression of 85P1B3 in Lung Cancer Patient Specimens



**Fig. 17: Expression of 85P1B3 in Prostate Cancer Xenografts Following
 Castration**



**Fig. 18: Expression of 85P1B3 in PC3 Cells Following
Retroviral-Mediated Gene Delivery**

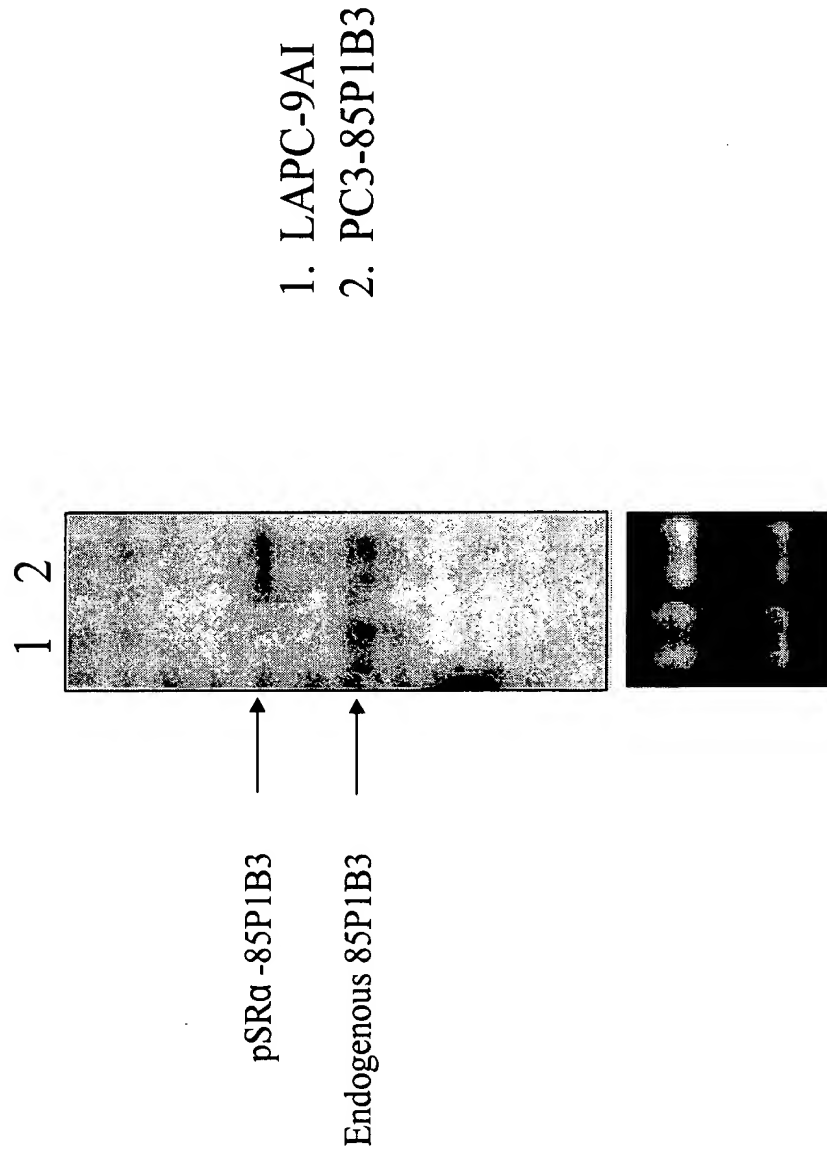


Fig. 19

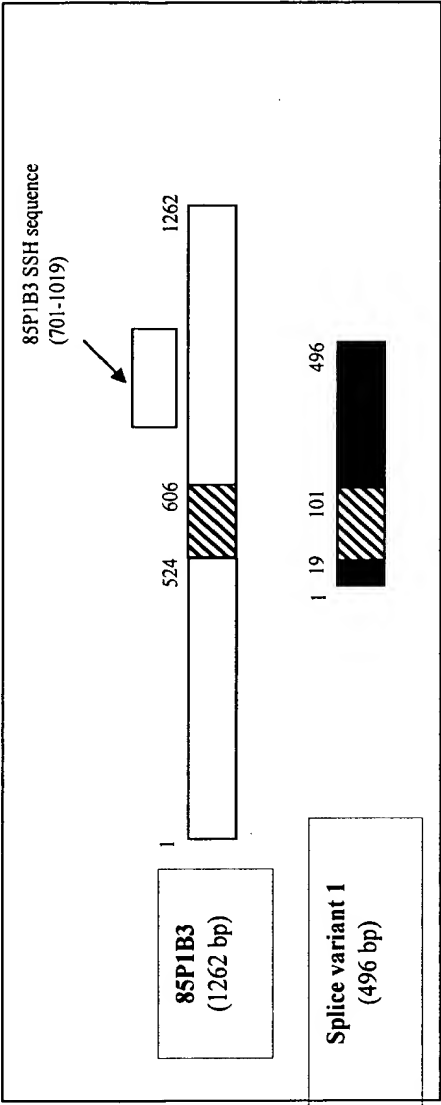


Fig. 20

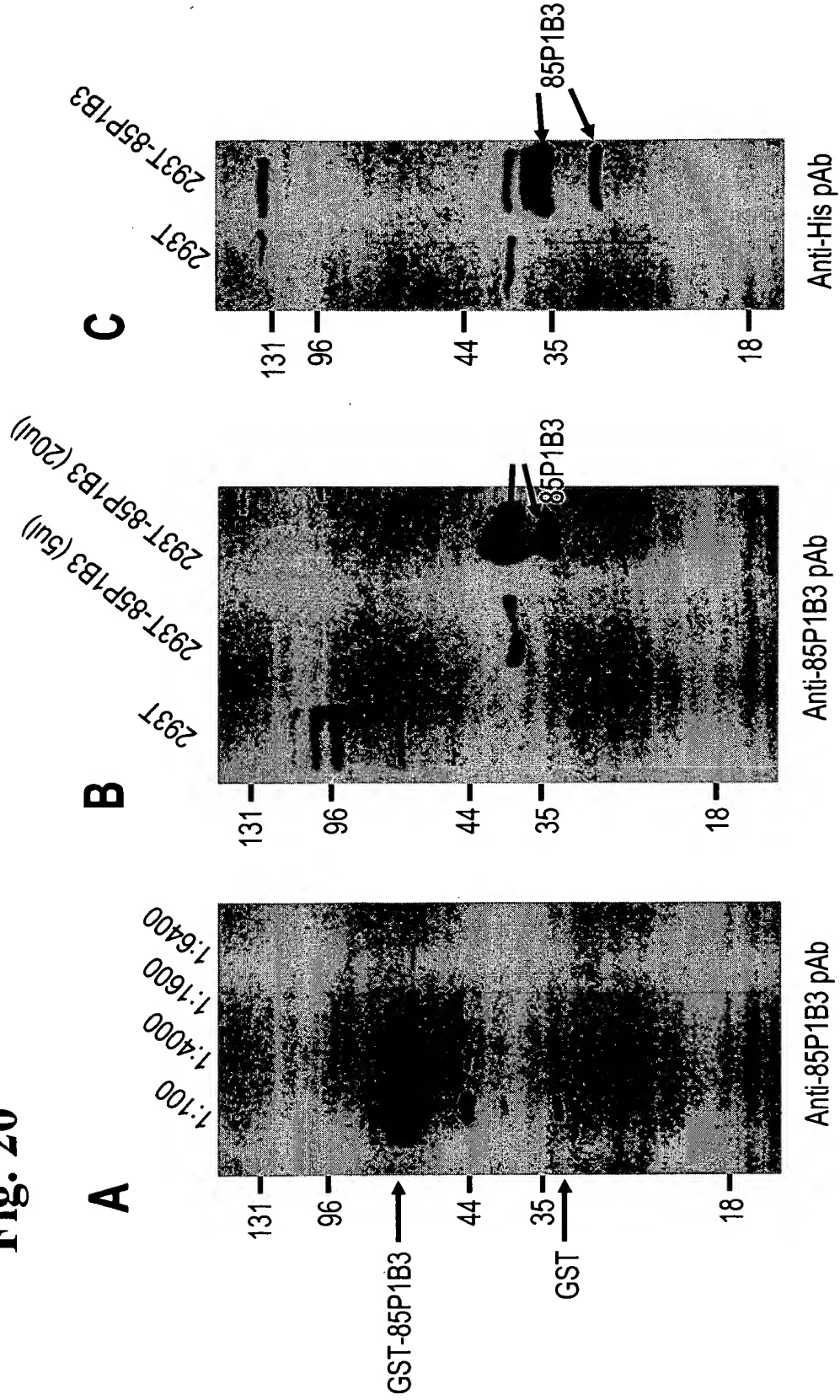


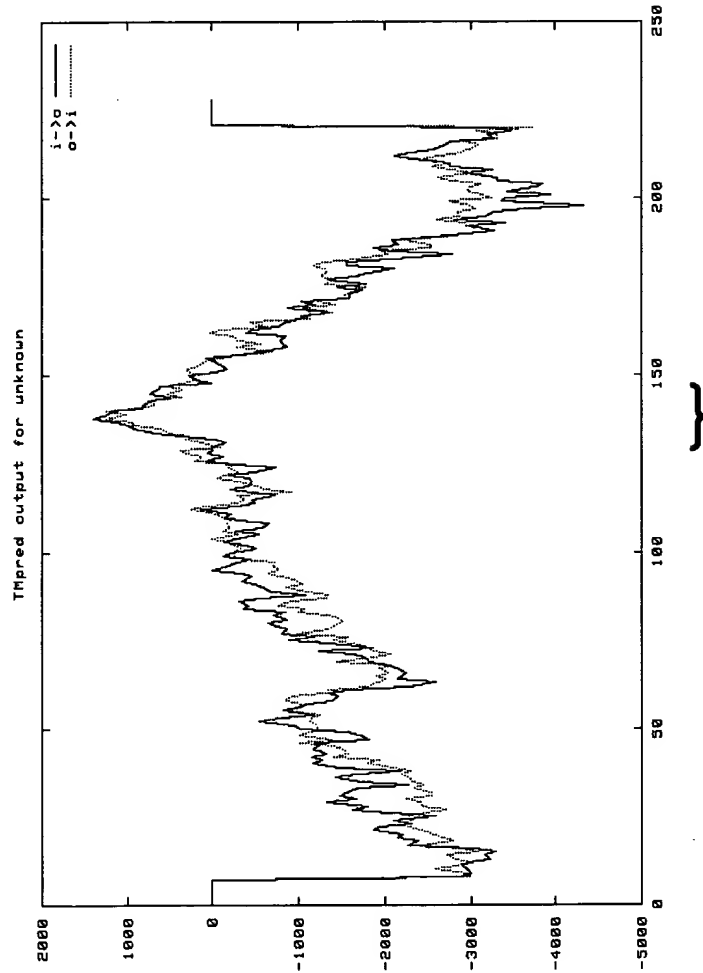
Fig. 21A

10 | 20 | 30 | 40 | 50 | 60 | 70 |

MAAQPLRHSRCATPPRGDFCGGTERAIDQASFTTSMEDTQVVKGSSPLGPAGLGAEPPAAGPQLPSWL
cccccccccccccccccccccccccccccccccccccccccccccccccccccccccccc
QPERCAVFQCAQCHAVIADSVHLAWDLSRSLGAVVFSRVTNNVVLEAPFLVGIEGSLKGSTYNLLFCGSC
chhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhhh
GIPVGFHLYSTHAALAAALRGHFCLSSDKMVCYLLKTKAIVNASEMDIQNVPLSEKIAELKEKIVLTHNRL
cccccccccccccccccccccccccccccccccccccccccccccccccccccccccccc
KSLMKILSEVTPDQSKPEN
hhhhhhhecccccccccccc

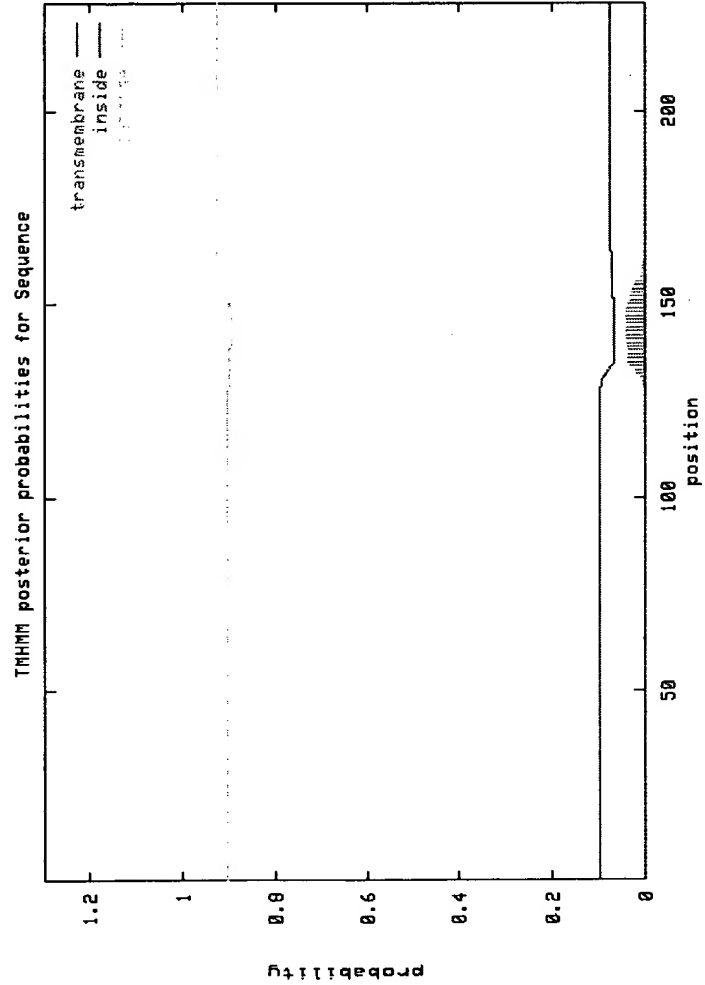
c: random coil (49.34%)
e: extended strand (13.97%)
h: alpha helix (36.68%)

Fig. 21B



1 transmembrane from amino acids 129-149

Fig. 21C



No transmembrane domains, soluble protein

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